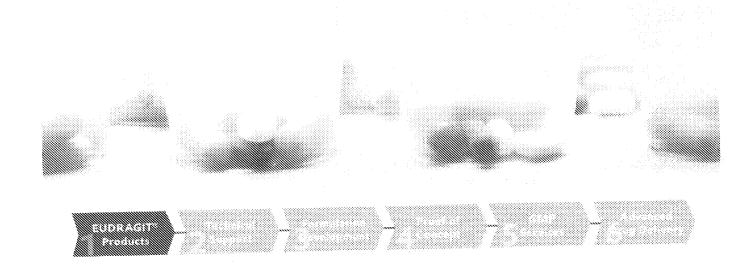
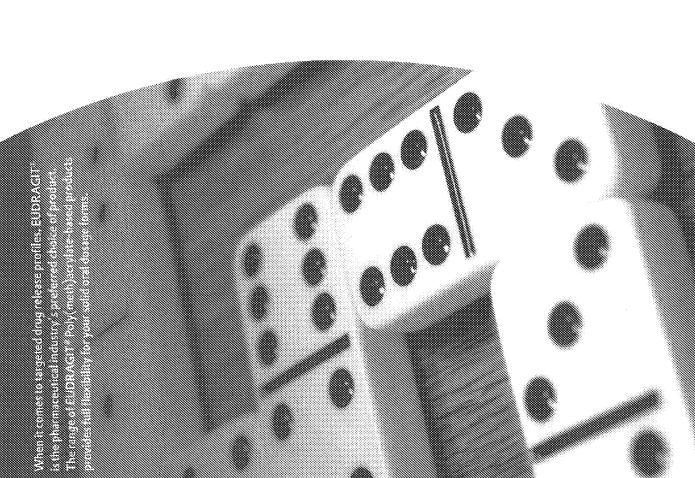




Aanylla Polymeis (on Solid Oral Dossigs Roms





Pharmaceutical Properties EUDRAGIT® Polymers --

compliance. The range of our properties. protection from external influ-ences (moisture) or taste/odor body. The flexibility to combine you to achieve the desired drug the right time and, if necessary, during the passage of the human the different polymers anables in the industry under the trade. relesse profile by releasing the Other Important functions are ganiz EUDRAGIT²³. These polymers allow the active in your solid desage form to perform ever a desired period of times drug at the right place and at The basis of our afferings are which are known worldwide our Poly(meth)acrylates for pharmaceutical applications,

A distinguished is mode indiscount 1. Poly(meth)acrylates; soluble in digestive fluids by saft forma-

EUDRAGIT® NE polymers with trolled time release of the active ingrequent by pH-independent polymers with alkaline and neutral groups enable conswelling.

luble but permeable in digestive

2. Poly(meth)acrylates, inso-

masking to increase patient

Applications: delayed and extensed dring release

Aulds EUDRAGIT® RL and RS masking through gaskric resis-tance to controlled drug release Applications: from simple taste 66n EUDRAGIT*L, S, FS and E polymers with acidic or alkaline release of the active ingredient. Euchanopy seu prinsibilitionido x=100CH, CR2×CHJ, GR culterativ BL 186(ppin)60 Euchantiv BL 186(ppin)60 groups anable pH-dependent in all sections of the intestine Aministic gethacytice copiologic Percebial grader dinskip addr n + 500CH, CH, NICRS \$12645FC125(upantagam) EUSZAGIF 6 100 Goog 60 COMPANY CONTRACT An Inomosika methan Keter Copols D E 0-15-0drug release profiles by offering range of different physical forms solution granules and powders). copolymers derived from exters whose physicochemical properpolymers are available in a wide COC-800 protective or sustained-release. ties are determined by functioproduct portfalls prevides full of acrylic and methacrylic acid, best performance for enteric, nal groups (%), EUDRAGIT® (aqueous dispersion, organic EUDRAGIT* polymers are Rexibility for your targeted Methecoficatolymetr functional group, certolyfication 2, = CODM (approx) Functional groups in education of the condition of the co Superacificación (Se 100) EUDBARD 1100/S 100/C 100/S The Part of the Pa feleshours/stra copoly

BLONCOFOR (1903) A

ELDRAGETANE SOSTANCE ASSOCIATION SOSTANCE (SQUARE SOSTANCE SOSTANC

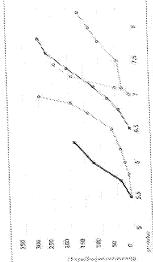
EUDRAGIT® offers valuable advantages for your enteric coatings:

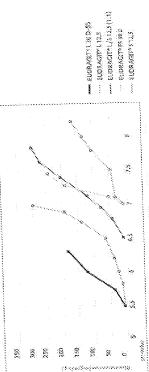
- @ Protection of actives sensitive & pH-dependent drug release to gastric fluid
 - @ Protection of gastric mucosa from aggressive actives
- # Increase in drug effectiveness
 - a Good storage stability
- & GI and colon targeting

and thus to achieve the required each other, making it possible grades can be combined with to adjust the dissolution pH, dissolve at rising pH values. EUDRAGIT® grades which inaddition, the different

gastrointestinal tract. Moreover, with the fullnuing technical dosage form is patient compliant. The preferred costing is EUDRAGIT* FS 30.0, which combines release in the colon coating ansures that the oral the asstroresistance of the collits or intestinal cancer, it is also required for drugs that are ment of intestinal disorders such colonis required for local treatas Crohn's disease, ulcerative Targeted drug release in the poorly soluble in the upper

a aqueous processing a highly flexible coatings a sujiable for multiparticulate tablet preparation edvantages:





Dissolution above pirt 5.5

30% Aquents Dispursion

£36D-55 130-55

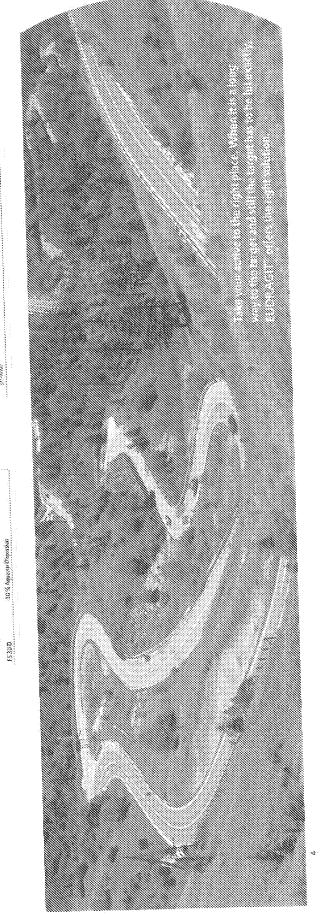
100

..... BUDRAGIPS 512,5

12.5% Organic Solution Dissolution above pH 7.0

\$ 12,5 1.12,5 2.100

12,5 % Onganic Sulution



Separate Separation product posttolia of anionic Gl targeting for the drug. 2007/00 12/09/80203

Gastroresistance and Gi Targeting

fryou ased to protect your active from the gastric fluid and would They enable rargeting sperific areas of the intestine. Pharma like to improve drug effectivepolymers are your preferred ness - EUDRAGIT* Land S chaice of coating polymers. Polymers offers a broad









Our protective polymers are mel extrusion process. During interects with the enhance active suitable for squeeus or organic the moltie entition process the which provides excellent tasks costings and can be applied in a cationic EUDRAGITF Epolymer masking properties.

Take advantage of protective EUDRAGIT® coatings:

⊗ pH-dependent drug release

nomical application. Pharma Polymers offer various catteric EUDRAGIT®E grades for making man extremely ecu-

Do you reed to protect your EUDRAGIT® polymers help active from motions on light and you reseal sensitive actives and would like to increase patients increase patients.

Moisture Protection and Odor/Taste Masking masking testes and o'dors. ELIDH.AGIT's Egrads
Even thin layers of ELIDR.AGIT? protective coasings
provides the destrict effect.

- Protection of sensitive actives
 - Taste and odor masking
 - Moisture protection
- Improved passage of the dosage form & Economical application
- & Smooth and glossy surfaces, good color coating

Solvabelingasticilate
up to pol 3.0
Solvabelia and permeable
above pri 5.0

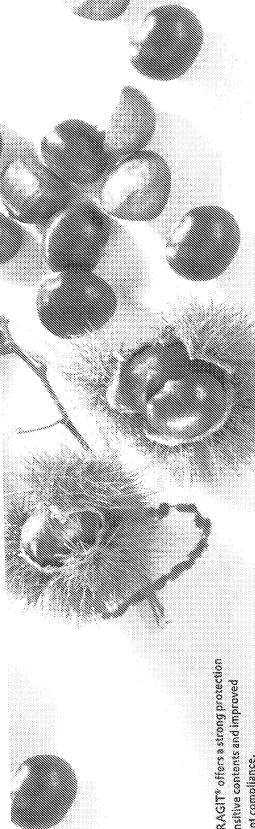
12.5 % Organit Solotion

£ 12,5 201.3

Supplied Standards

N259500 Grannles

Geography Podes



EUDRAGIT® offers a strong protection of sensitive contents and improved patient compliance.

Time-Controlled Drug Release

you achieve your destrod release Whether you need your drugto release over a specific period from the advantages of multiparticulate or matrix formulaof time or would like to benefit tions - EUDRAGIT* can fielp

gastrointestinal tract to increase controlled throughout the entire polymer combinations of EUDRAGIT "RL and RS grades patient compliance. Different profile. Drug delivery can be the therapeutic effect and

EUDRACIT® MEand NIM grades allow custom-tallored release which do not require addition profiles to achieve the desired are neutral ester dispersions drug delivery performance. of plasticizer.

formulation options: There are 2002





for granulation processes in the EUDRAGIT * serves as a matrix N.M.30 D is particularly suitable within which the active ingredient is embedded. The matrix manufacture of matrix tablets. structure is obtained by direct compression, graphiation, or melt extrusion. EUDRAGIT®

coating material, usually for the coating of peliets or particles that are filled into capsules or pellets or particles act as diffusion compressed into tableta. These release a constant drug quantity EUDRAGIT" is employed as a cells in the digestive tract and per unit of time (multi-unit dosage form≡).



Benefit from EUDRAGIT® coatings with sustained release:

- Ø Time-controlled release of active ingredients Therapeutically customized release profiles.
- # Higher patient compliance due to reduced number of doses to be taken
 - Cost-effective pracessing

Insolutio, low permobbility pH-independent swelfing No plasticizer required Highly flexible

G 68 MN NE 30 5 ME40.0

Law permeability ph-independent swelling

39 % Aqueous Dispersion 30 % Agosons Dispersion AC% Aquowas Dispersion 30 % Aqueous Dispersion

85290 8512,5

12.5% Diganic Solution

High permeability pH-independent swelling

30% Aqueous Dispersion

RUBB

Rt.13,5

RS 100

RSPO

12.5% Organic Salurion

Granteles

Pavader

trisoloble

Statebullan Zapperda

Sheekolike

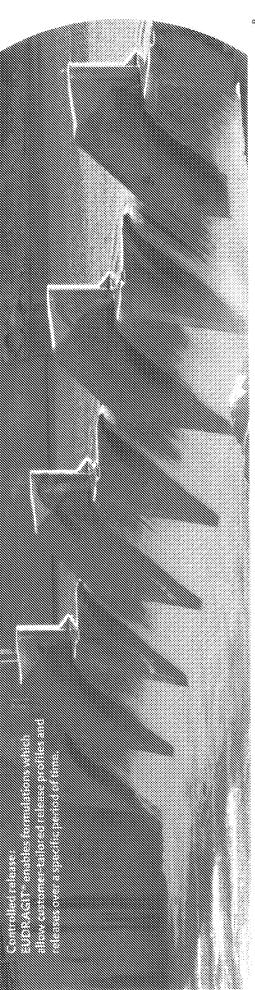
E-Carello Bakere

Granules

RL 100

RL FO

Powder



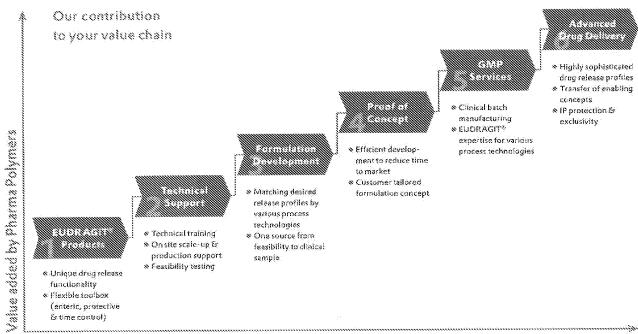
Market Strength by means of Strategic Partnership

Pharma Polymers, a business line of Evonik Industries, offers the complete line of EUDRAGIT® products and related services along the value chain of our customers. For over 50 years we have proven our reliability as a quality partner to the pharmaceutical industry. Our state of the art services cover various stages of the development processes, including

- ⊗ advanced technical support
- ★ formulation development
- proof of concept

Our customers see us as a strategic partner for their developments of solid oral dosage forms with a targeted drug release profile. By using our value adding business model our customers get:

- increased efficiency in their R&D and manufacturing processes
- new drug delivery technologies
- reduction of the time to market for their developments
- professional management of their product's life cycle



Intensity of partnership

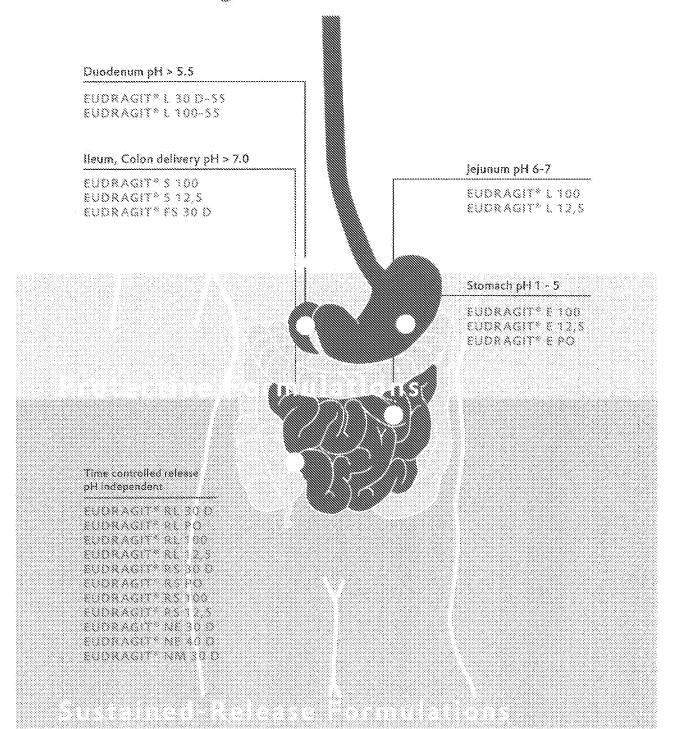


EUDRACHT^e acgaice



EUDRAGT

Versatile Polymers for Oral Solid Dosage Formulations



mabnaqab-Mq

EUDRAGIT® Versatile Polymers for Oral Solid Dosage Formulations

zuspusdspuj-Hq

| ###################################### | | | Properties | | Comment of the Comment |
|--|---------------------------------|---|---|--|--|
| ###################################### | | | | | |
| ELDSKAGITY 1.31 D-555 Aquecus Dispersion 30 W, ELDSKAGITY 2.12.5 Criganic Salation 12.3% ELDSKAGITY 2.12.5 Criganic Salation 12.3% ELDSKAGITY 2.12.5 Criganic Salation 12.3% ELDSKAGITY 2.12.5 Criganic Salation 12.5% ELDSKAGITY 2.12.5 Criganic Salation 12.5% ELDSKAGITY 2.12.5 Criganic Salation 12.5% ELDSKAGITY 2.100 Crander ELDSKAGITY 2.100 Crander | | | Commence of the second | Etherchive and stable epidents | Michael Stein (GRA Stein Const. See |
| ELDRAGITY E. 1006 ELDRAGITY E. 1006 ELDRAGITY E. 12.5 CARDONAGITY E. | | | cost and sporting accompanies | ර්තුර්ගන්ත කරන දෙන අත්තරයේ දැන් | Action and the Company of the Compan |
| EUDRAGIT* 1.13.5 | | | × 5 | social substances of the substances | 2973 JANO 1381 (ANV) (288) 1983 1983 |
| EUDRAGITY 5 100 Cranides EUDRAGITY 5 12.3 Craparit Station 12.5% EUDRAGITY 5 10 Cranides EUDRAGITY 5 10 Cranides EUDRAGITY 5 10 Cranides EUDRAGITY 8 10 CRANIDES EUDR | | Antenic polymers with methecrylis skid as a kinedional group | . ceresolitation shows, par m.e. | हेर पुरस्कर देश जिस्का हर्षा च्याको वीक्स स्थेत्वहरू | 0.60/e 12883 |
| EUGRAGITY E 12.5 CARACTER E 10.0 ELESPAGITY E 10.0 ELEPAGITY E 10.0 ELEP | | | | Sites specific stray definery in | 86, 6m, 438/445, 395, 3485-343 |
| ### Aquence Dispersion 30% ELICRAGITY E 100 Grandes ELICRAGITY E 12,5 Grandes ELICRAGITY E 100 Powder ELICRAGITY E 100 Powder ELICRAGITY E 100 Powder ELICRAGITY E 100 Crands ELICRAGITY E 10 | | | Disorbation above pH 740 | ELDRAGIT" U/S yraida | SIME 12/42 |
| ELDERAGITY E 100 Granutes ELDERAGITY E 12,5 Carganic Solution 12,5% ELDERAGITY E 110 Carganic Solution 12,5% ELDERAGITY R 110 Carganic Solution 12,5% ELDERAGITY R 5 30 C Aguacias Dispersion 30% ELDERAGITY R 5 30 C Aguacias Dispersion 30% ELDERAGITY R 5 30 C Aguacias Dispersion 30% ELDERAGITY R 5 106 Granutes ELDERAGITY R 5 10 C G G G G G G G G G G G G G G G G G G | | | | Variable referes profiles | CMF 12981 |
| ### ################################## | | | | | |
| ELECRACITY E 12.5 ELECRACITY E PO Peerger ELECRACITY E 21:0 ELECRAC | : | : | | | Ph. Bun, USP, AN, JPB, Bladf 1243 |
| ELIDRAGITY E.P.C. Poweder ELIDRAGITY R. 110. ELIDRAGITY R. 110. ELIDRAGITY R. 110. ELIDRAGITY R. 110. ELIDRAGITY R. 100. | Reganic (Spilither, 12,5 | Catwork papyros vigo dinothyl- gainnethyl tipethetrylete as a fortsanal graup | Spiridhe in goznici (kod op tu při 5.0 Vzestlabíře snd permenplicy kom při 5.0 | Leave Alected y, 1946 pigneleat, biteding expositing yourd authoritiesy, from postymen specificity gives | 00063200 |
| ### ################################## | | | | | क्षान्य हिन्दी कार्यक्षित हिन्दा |
| BUDRAGITY RL 30 D | | | | | |
| EQDRAGITY RL FG. Avaider EQDRAGITY RL FG. Grander EQDRAGITY R. 100 EQDRAGITY R. 85 30 O Aquebus Dispersion 20% EQDRAGITY R. 50 O Aquebus Dispersion 50 % EQDRAGITY R. 50 O Aquebus Dispersion 50 % EQDRAGITY R. 50 O Aquebus Dispersion 50 % | 0.00 | | | | USE/NE DAY 1242 |
| EUDRAGITY RL 1400 SUDPAGITY RL 1625 SUDPAGITY RS 30 C Figure Dispersion 20% Figure St 106 F | | | Intelligies | | The contact on Statement and |
| SUDPAGETY RE 18.2 C Organic Solution 12.5 % EUDRAGETY RS 30 D Aquepus Dispersion 30% ELORAGETY RS 10.5 Congent Solution 12.5 % EUDRAGETY RS 12.5 Congent Solution 12.5 % EUDRAGETY RS 12.5 Congent Solution 12.5 % | | | tiga periodomy pH adependent suelling | | rijo enigo projeka (Wrosticka projeka series |
| EUDRAGITY 85 30 D Aquejus Disperçion 20% ELDBAGITY 85 FQ Breeder Grannles. ELDBAGITY 85 126 Grannles. ELDBAGITY 85 12,5 Creeper Solution 12.5 %. | Organic Saletide 12.5 | Week-facultie condopresswith | | Citisponized release profiles by combination of Ru and 85 gredies in any combination of Ru and 85 gredies in | 0887 1342 |
| ELDBAGIT 85:00 Paride ELDBAGIT 85:13,5 Crayin Solation 12.5 % ELDBAGIT ME 50.0 Aquesia Digistron 10.5% | | ostoscoposta se actioalinas group. | | atrictory, agrees Sudable for matrix structures | कहता संभव त्रेम/अहत |
| ELEGRAGIT & 106 | | | | | |
| ELDRACHY 85 (2,5) Crepeit Solation 12.5 %. ELDRACHY NESS D Aqueous Olopecom 30 % | | | | | zeon Juvee dad Gladduce e en da |
| ELECTRAGETY NESS D Aqueous Disperson SQ'89 | Chagante Solution 12.8 | | insubble Low parmeability 2H solveoness: Similars | | 23621 |
| | | | | | Ph. Eur. 115P/NE, [86], 104/F (382) |
| ECOXXXXII (Mark) 20 Aquenus Dispersion Ruxe | E-40 to Aqueous Dispersion, 90% | Neutral pulymer of meth-facilities | | Najpisatoriser, reguresa. kujibly flexible | chile 2522 |
| EUDRÁGATY-geides EUDRÁGIY-ANA SÚ ID Aqueous Dispersion 36 % | | | | ं अप्रकृतिकृतिकृति महकाति अतुत्तिहरू पुरुष्ठ | Pw. Euc., DNA6 එ.822 |

Delivery and Packaging

| | ** | | 85 \$ | 85. | |
|----------|------------------------------|---------------------|--|---|-----------------------|
| | Grade. | Unit (bg. net) | Packaging | Storage | Flash Point |
| \$ | EUDRAGIT" L 30.D-55. | 5, 30, 200*, 1000** | | | |
| | EUDRAGIT* NE 30 D | 5, 30, 600** | | | |
| | EUDRAGIT® NE 40 D | | Polyethylene canister | Protect from freezing. Store at controlled room temperature. | |
| : | EUDRAGIT® NM 30 D | | Polyethylene drum* | | Mot flammable |
| | EUDRAGIT® RS 30 D | .s, 30 | Polyethylene container** | | |
| | EUDRAGIT® RL 30 D | | | Protect from freezing and do not store above 25°C (77°F). | |
| \$ *! | EUDRAGIT* FS.30 D | | | Protect from freezing, Store between +5°C and +10°C (41°F and 50°F). | |
| | EUDRAGIT® L 100 | | | | |
| | EUDRAGIT® L 100-SS | | | | |
| | EUDRAGIT®\$100 | | | | |
| | EUDRÄGIT® RS 100 | 5, 20 | PP box with polyethylene inner bag | Store at controlled room temperature. Protect against moisture. | |
| | EUDRAGIT® RL 100 | | | | Not flammable |
| | EUDRAGIT® RS-PO | | | | |
| | EUDRAGIT* RL PO | | | | |
| | EUDRAGIT® E 100 | | | Protect from warm temperatures. Protect against moisture. | |
| | EUDRAGITY E PO | PÖ. | | Store at temperatures up to 25°C (77°F). Protect against moisture. | |
| | EUDŘAĞIT [®] E 12,5 | | | Protect from warm temperatures. | -15°C(\$1°F) |
| | EUORAGIT® L 12,5 | x 20 150 | | Store in hightly closed containers. | |
| | EUDRAĞIT [™] \$12,5 | 4, 20, 150. | Steel drum with exterior lacquer coat and poly- ethylene lining | Protect from swarm temperatures. Store in tightly closed containers. Do not store at temperatures below. 10°C.(50°F). | -(3,5 °C (56,3 °F) |
| | EUDRAGIT® RS 12.S | 4, 20 | * | Protect from warm temperatures. Since in tightly-closed containers. | -15°C (5°°F) |

Further information is available from the following addresses:

www.eudragit.com

Germany

Evonik Röhm GmbH
Pharma Polymers
Kirschenallee
64293 Darmstadt
PHONE +49 6151 18-4019
FAX +49 6151 18-3520
eudragit.germany@evonik.com

USA

Evonik Degussa Corporation Pharma Polymers 2 Turner Place, PO Box 365 Piscataway, NJ 08855 PHONE +1 732 981-5383 FAX +1 732 981-5484 eudragit.usa@evonik.com

India

Evonik Degussa India Pyt. Ltd.
Pharma Polymers
Research Centre
Saki Vihar Road, Saki Naka
Mumbai 400 072
PHONE +91 22 6723-8800
FAX +91 22 6723-8811
eudragit.india@evonik.com

China.

Evonik Degussa (China) Co., Ltd.
Pharma Polymers
55 Chungdong Road
Xinzhuang Industry Park
Shanghai 201 108
PHONE +86 21 6119 1032
FAX +86 21 6119 1116
eudragit.china@evonik.com

Japan

Evonik Degussa Japan Co. Ltd. Pharma Polymers
Shinjuku Monolith 12F
2-3-1, Nishi-Shinjuku
Shinjuku-ku
Tokyo 163-0938
PHONE +8135323-8794
FAX +8135323-8789
eudragit.japan@evonik.com

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of pro-duct properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products. could not be used.

Evenik Röhm GmbH is the owner of patent rights covering the use of EUDRAGIT® polymers in compositions, procedures and/or applications which may be subject to license agreements. Compositions, procedures and/or applications failing within the claims of patents related to EUDRACOL® and EUDRAPULSE® and EVDRAMODE® will always require separate license agreements.

® = registered trademark.

EUDRAGIT = reg. Trademark of Evonik Råhm GmbH, Darmstadt, Germany



Strong to the second of the se